

Ambient Air Quality Guidelines

Ambient air quality guidelines can be used to guide the assessment of impact from new proposals as well as for the management of existing air quality when standards have not been developed.

An ambient air quality guideline value is a level (concentration) of air pollutant which it is desirable not to exceed in order to ensure that human health, amenity and the environment are protected. Compliance with a guideline value may or may not be required under legislation, depending on site specific circumstances.

Ambient air quality guideline values are intended to be met at all sensitive receptors (both environmental or human). Modelling (in accordance with DEP Modelling Guidelines) may be used to demonstrate that ambient guidelines can be achieved.

The Current Situation

The WA DEP and EPA routinely adopt (where necessary) ambient air quality guideline values in the assessment of new proposals, and in the management of both local and regional ambient air quality. As a matter of policy, the EPA and DEP have now adopted the NEPM standards for ambient air quality. For all other air contaminants, the EPA and DEP have routinely adopted and/or adapted guideline values from other jurisdictions where available. Whilst the approach used has remained relatively consistent, the methodology has not always been articulated in the assessment processes. This absence of transparency, at times, has been considered inflexible, unnecessarily constraining and lacking in certainty in the final outcome. It is desirable to improve this situation for all parties concerned.

An Interim Approach

As of December 2000, the DEP has articulated an interim approach to adopting ambient air quality guideline values. This interim approach is to adopt the NEPM standards for Ambient Air Quality. In the absence of a NEPM standard, the DEP will adopt the WHO Guidelines for Air Quality (2000), with appropriate amendments to suit the WA context; and in the absence of a NEPM standard or a WHO guideline, the DEP will to adopt criteria from another jurisdiction (once it has been assessed and determined to be applicable to the WA context).

The interim approach has been put in place temporarily for reasons of expediency and to provide industry, community and the government with an appropriate alternative in the short term. It is intended that the interim approach will continue in practice until such time as the final WA ambient air quality guideline values are available which will follow a process of stakeholder consultation.

The Future

The DEP and the Health Department of WA have embarked on a joint program to develop ambient air quality guidelines and guideline values for air contaminants of concern in WA.

The program will develop the following guidelines:

- Ambient air quality modelling guidelines;
- Sampling and analysis guidelines;
- Guidelines for the assessment and management of point sources;
- Interim approach for specifying ambient air quality guideline values;



- Ambient air quality guideline values.

The overall objective of the program is to provide a framework and benchmark for the assessment and management of air contaminants in WA with the aim of protection of human health and the environment. The guiding principles for the development of the ambient air quality guidelines and guideline values are that:

- A clear and consistent risk management approach is established;
- This approach should be flexible in application to allow for protection of the most susceptible receptors but also to provide a mechanism for the development of site specific guidelines where shown to be appropriate;
- It should be applicable in local, regional and site specific situations;
- It has assessment and management applications;
- It ultimately ensures maintenance of acceptable air quality and improvement of air quality where necessary.